DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-014185 Address: 333 Burma Road **Date Inspected:** 18-May-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes N/A No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

Summary of Items Observed:

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

BAY-6

The following Non Destructive Testing (NDT) Inspection carried out as per the ZPMC submitted Notification No. 005769.

Ultrasonic Testing (UT)

This QA performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA generated UT report for this date. The members are identified as OBG Traveler Rail bracket weld Components. Total number of welds UT Tested: 03 No's. The weld designations are review as follows:

- 1. TR5B-PP69, 67-003.
- 2. TR6A-PP62-001.

LAY DOWN YARD.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Segment: 10CW-Panel Point(PP)#92~94.

This QA Inspector along with Caltrans QA Mr. Manikandan performed joint Inspection for the 'T'Rib Horizontal and vertical offset at FL3 Location by using 1000 mm straight edge.

The measured readings were data recorded, generated the report and submitted to the Team Leader for further action.

This QA Inspector along with Caltrans QA Mr. Manikandan performed joint Inspection for the 'T'Rib cope holes buckling areas at FL3 Location by using 150 mm steel ruler.

The measured readings were data recorded, generated the report and submitted to the Team Leader for further action.

TRIAL ASSEMBLY.

This QA Inspector witnessed final Bolt tension verification for the Cable Tray support at Lift:8West from PP#64~65 and 67~68. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed as per the ZPMC submitted Notification No. 00350 Dated: May 18, 2010.

Details of bolt size, RC Set # and final torque value are as follows:

Bolt sizes used were 3/4"X2 1/4", RC Set# DHGM60580 and final torque value was 340 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666.

This QA Inspector witnessed final Bolt tension verification for the Upper and Lower Chevron at Segment:8BW and 8CW from PP#65~71. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed as per the ZPMC submitted Notification No. 00351 Dated: May 18, 2010.

Details of bolt size, RC Set # and final torque value are as follows:

Bolt sizes used were M22X65, RC Set# DHGM220021 and final torque value was 543 N-m.

Bolt sizes used were M22X70, RC Set# DHGM220017 and final torque value was 520 N-m.

Bolt sizes used were M22X75, RC Set# DHGM220034 and final torque value was 453 N-m.

Bolt sizes used were M22X80, RC Set# DHGM220029 and final torque value was 447 N-m.

Manual Torque wrench was been used with Sr. No. XO2-779.

This QA notified ZPMC QC identified as Mr.Hu Mez Gang is present during the inspection.

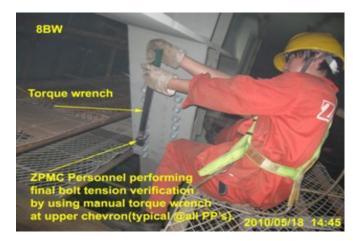
Refer attached photo for reference.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

Only general conversation was held between QA and Quality Control (QC) concerning this project.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Hall,Steven	QA Reviewer